

Notes Upon Flies of the Genus *Solva* Walker

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Four species of flies belonging to or close to the genus *Solva* Walker, have been collected by the author in Mississippi. Two of these appear to be undescribed. Three of these species present certain differences from the genotype of *Solva* and for them I erect a new subgenus. Ten species of *Solva* have previously been described from North America, several of which appear to be wide-spread.

Genus *Solva* Walker

Phloophila new subgenus

Eyes bare. Males dichoptic. Antennae set a little below the head in profile as in *Solva*. Third antennal segment with eight annuli. Body more compact than in *Solva*. Hind femora in all the known species considerably enlarged and bearing rows of small teeth upon the ventral surface. Wings with venation in general similar to *Solva* but with the vein M_3 and the vein Cu_1 arising from the same point; the vein M_3 sometimes evanescent. All the veins strongly microsetate above and in some cases below, in contrast to the limited distribution upon the first two or three veins in *Solva*.

Subgenotype: *pallipes* Loew.

Both Leonard* and Malloch* have previously called attention to the differences between *pallipes* and the other species of *Solva*. Malloch pointed out that the larvae and pupae of *pallipes* Loew present characteristics justifying its separation.

Phloophila crepuscula new species

This species is related to *pallipes* Loew in the black teeth upon the hind femora but is quite distinct in the very different, shorter and rather swollen antennae, as well as the entirely black, oval more widened abdomen, and the venational difference.

Male. Length 4.5 mm. *Head*: the vertex, front and face are black; the eyes are margined with white pubescence and

* Leonard, M. D., Rev. of N. Amer. Rhagionidae, page 43 (1930); Malloch, M. R., Bull. Ill. St. Lab. of Nat. Hist., Vol. XII, art 3, p. 341 (1917).

white pile that expands inwardly and gradually upon the lower half of the front leaving the middle bare. The pile of the face and front and vertex is silvery. The antennae are dark brown upon the first joint and light brownish-yellow upon the second and almost white upon the ventral and medial surfaces of the remaining apical part; the apical and dorso-lateral surface of which is blackish; the antennae are much shorter and considerably wider, especially upon the basal half of the third joint, than in *pallipes* Loew. *Thorax*: quite convex and rounded and shining black with short, appressed, whitish pile which has a very faint, scarcely noticeable yellowish tinge. The humeri, sides of the pleura below the mesonotum and the broad middle of the scutellum are pale yellow. The sides and base of the scutellum are blackish. *Abdomen*: broader, wider, more oval and more flattened than in *pallipes* and wholly shining black except for the usual, transverse, basal, oval, yellowish, non-chitinized area that lies below the metanotum. Halteres pale yellow. *Legs*: including the coxae, but excepting the extreme base of the hind coxae and the last three tarsal joints, entirely pale whitish-yellow. The distal tarsal joints are pale brown, the base of the hind coxae dark brown. Pile of the legs pale except for a double row of very short, black, tooth-like spines along the outer ventral margin of the hind femora upon the distal half. *Wings*: hyaline, the veins dark brown. The vein M_3 , or the second section of the fifth longitudinal vein, is reduced and it fails by nearly half its length to reach the margin.

Female. Uniformly larger, measuring 6.5 mm.; similar in every respect to the male except for larger size and still broader and more oval abdomen.

Holotype: a male, allotype female, two paratype males and eleven paratype females, all taken at the University, MISSISSIPPI, upon windows in May, and usually in the late afternoon during the years 1940-42.

Phloophila pygmea new species

This species is related to *pallipes* Loew and differs in the differently shaped and colored antennae, and the dark brown, black tipped palpi.

Female. Length 4.5 mm. *Head*: the front, face and vertex are black, the front has an appressed band of whitish pile, the hairs directed towards the midline above and this band is divergent upon the lower half of the front until it reaches the eye margin at the base of the antennae. The hairs of the two sides intercross upon the upper half of the front. Palpi dark brown with black tip. The antennae are elongate and rather slender but less tapering than in *pallipes* Loew. *Thorax*: moderately convex and shining black with sparse, appressed, whitish-yellow pile which is not conspicuously formed into bands or stripes as it is in *pallipes*. The humeri, the lateral margins of the thorax just below the mesonotum and the scutellum except very narrowly upon the base and narrowly on the sides, are brownish-yellow. *Abdomen*: rather short and moderately broad; it is shining black with extremely slender, yellow margins upon the posterior margin of the third and fourth segments and with a trace of these upon the second segment. The sixth and seventh segments are entirely shining black without the yellow spots characteristic of *pallipes*. *Legs*: pale yellow, the apices of the hind femora are very narrowly brown, the distal tarsal joints light brown. The hind femora are more slenderly thickened than in *pallipes* and have two rows of very tiny, black, spine-like teeth upon the outer ventral margin almost as far as the base. *Wings*: greyish hyaline, the veins dark brown, the venation similar to *pallipes*.

Holotype: a female. Oxford, MISSISSIPPI, May, 1941.

The antennae upon the medial and ventral surfaces are dark reddish-brown instead of whitish-yellow, the remainder of the antennae is brownish-black.

Phloophila pallipes Loew

This species is almost always abundant late in every spring season and is commonly found on windows.

Solva americana Wiedemann

Twenty-six specimens of this fine species have also been collected at Oxford, Mississippi, upon laboratory windows, in May. Of them only two were females.